



SFWMD & FPL Agreement and Comprehensive Monitoring Plan

October 14, 2009



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FPL Turkey Point Uprate Project Post-Certification Requirement



- Overview of the State's Power Plant, Transmission Line and Pipeline Certification Process – *Sarah Nall*
- Background on cooling canals and proposed revisions to 1983 SFWMD & FPL Agreement – *Ruth Holmes*
- Comprehensive Groundwater Quality, Surface Water Quality & Ecological Monitoring Plan – *Damon Meiers*
- Recommended Action: *Terrie Bates*



Florida Siting Acts for Electrical Power Plants & Transmission Lines and Natural Gas Transmission Pipelines

**Ch. 403, Part II, Florida Statutes
Ch. 403, Part VII, Florida Statutes**



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**Sarah Nall, Deputy General Counsel
Office of Counsel**

Overview



- **Provide a centrally coordinated regulatory process**
 - Administered by the Dept. of Environmental Protection
 - Oversight by the Division of Administrative Hearings
- **Certification issued by Siting Board (Gov. & Cabinet)**
 - Secretary of DEP may issue Certification if all parties stipulate to all facts and conditions
- **Preempts all other state, regional and local govt. regulation of electrical power plants transmission lines and natural gas transmission lines**

Superseded Laws and Regulations



- **Siting Acts govern, control and supersede any other law, rule, regulation, or ordinance of the state or any political subdivision, municipality, or agency**
- **Certification is in lieu of any license, permit, or certificate required by any state, regional, or local agency pursuant, but not limited to, Chapters 125, 161, 163, 166, 186, 253, 298, 373, 376, 379, 380, 381, 387, and 403, Florida Statutes**
- **Certification authorizes construction and operation, subject only to the conditions of certification.**

Certification Process



- **Application formally filed**
 - DEP refers to DOAH for assignment of Admin. Law Judge
 - DEP determines completeness based on Agencies recommendations
 - Local government sends DEP a determination of consistency with existing land use plans and zoning ordinances
- **Agencies prepare Reports and submit to DEP**
- **DEP prepares a project analysis and files it with Judge**
- **Certification Hearing (if needed)**
- **Certification issued by Siting Board or Secretary of DEP**
- **Post certification submittals**

Water Management District Analysis and Report



- **District should address matters within its jurisdiction, including but not limited to, the impact of the proposed electrical power plant on:**
 - water resources,
 - regional water supply planning
 - District lands and works
- **Recommendation for approval or denial**
- **Proposed conditions of certification on matters within the District's jurisdiction**

Transmission and Pipeline Siting



- "Corridor" is a proposed area within which a transmission or gas pipeline may be located.
 - Electric transmission line corridor may not exceed one mile in width
 - Natural gas pipeline corridor may not exceed 1/3 mile in width
- "Right-of-way" is the land necessary for the construction and maintenance of a transmission line.
 - The right-of-way must be located within the certified corridor.
 - The actual right-of-way is identified by the applicant after certification in post-certification documents filed with DEP prior to construction.

Transmission and Pipeline Siting



- The area within the corridor in which a right-of-way may be located may be further restricted by a condition of certification. 403.522(10)
- Alternative Corridors may be proposed by any party during the application process.

DEP's Project Analysis



- **Based on agency reports from all review agencies, DEP prepares statement indicating whether proposed activity will be in compliance with:**
 - matters within DEP's standard jurisdiction, and
 - substantive criteria of affected agencies
- **DEP's recommendation on disposition of the application, variances or other relief and of proposed conditions of certification**

Final Disposition of Application



- **After DEP's Project Analysis is issued, focus of the certification process shifts to DOAH**
- **Parties develop pre-hearing Stipulation to document all non-disputed issues of fact, law and conditions of certification**
 - If all parties stipulate to these matters, Judge relinquishes jurisdiction to DEP
 - Secretary of DEP issues the Certification
- **If all parties do not reach agreement, the Judge holds a Certification hearing**
 - Judge submits Recommended Order to the Siting Board
 - Siting Board issues the Certification

Post-Certification Review and Amendments



- **Post -Certification Submittals**

- Conditions of Certification may require submittals to one or more agencies for the purpose of monitoring for compliance with the Certification.
- Submittals must be reviewed on an expedited basis; review must be complete within 90 days after complete information is submitted to a reviewing agency.

- **Material Changes Subsequent to Certification**

- Licensee must submit a written request to DEP to propose any material change.
- DEP determines whether the proposed change requires a formal modification to the conditions of certification.

FPL Uprate Project



- **FPL's Uprate Project for existing Nuclear Power Plant Units 3 & 4 at Turkey Point**
- **Certification issued by Secretary of DEP in October, 2008**
- **Certification Condition X requires post-certification submittals:**
 - **Revision to 1983 Agreement between District & FPL**
 - **Revised Monitoring Plan**



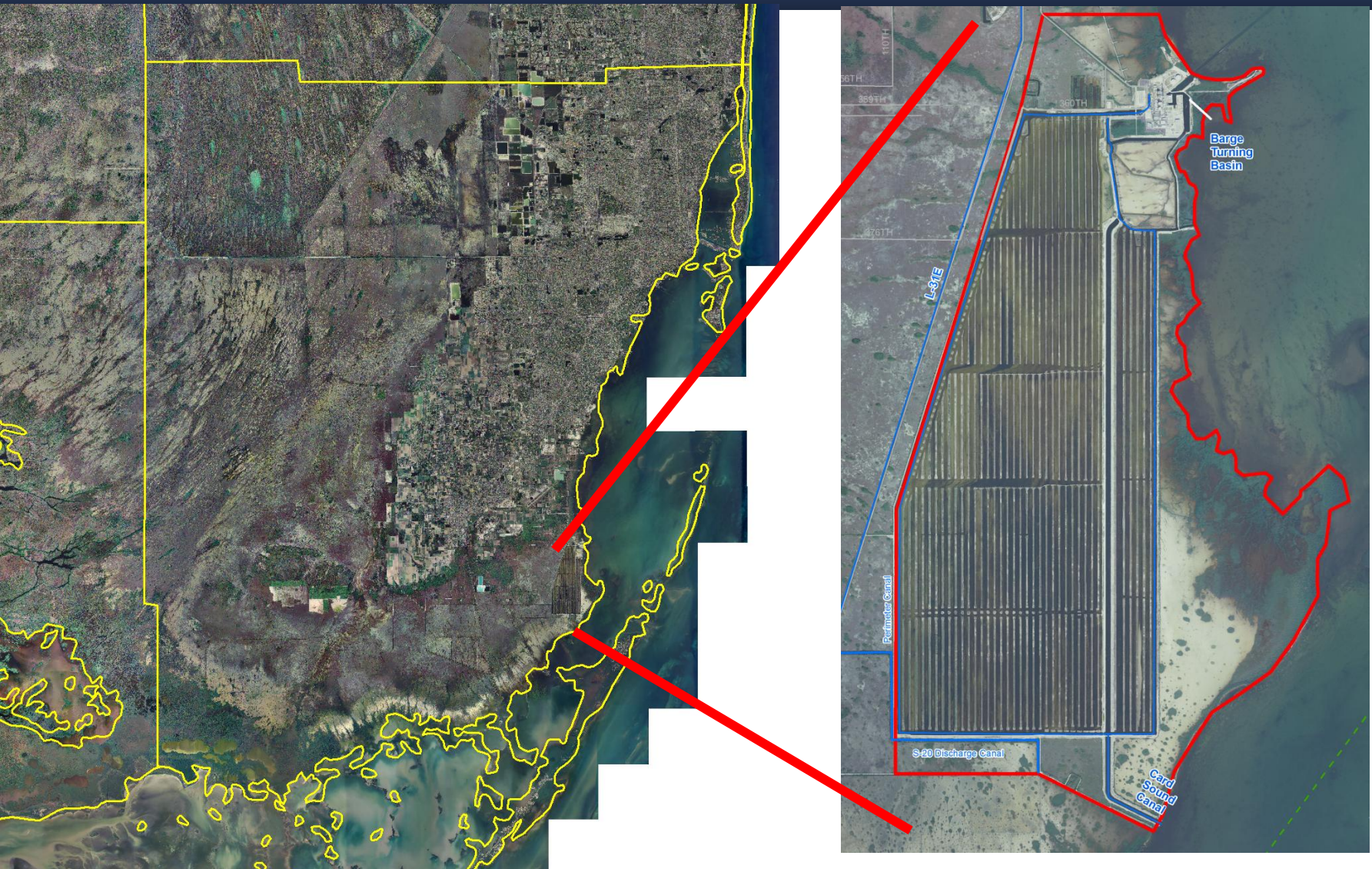
Background on Cooling Canals and Proposed Revisions to 1983 SFWMD & FPL Agreement



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**Ruth Holmes. Senior Attorney
Office of Counsel**

FPL Turkey Point Power Plant

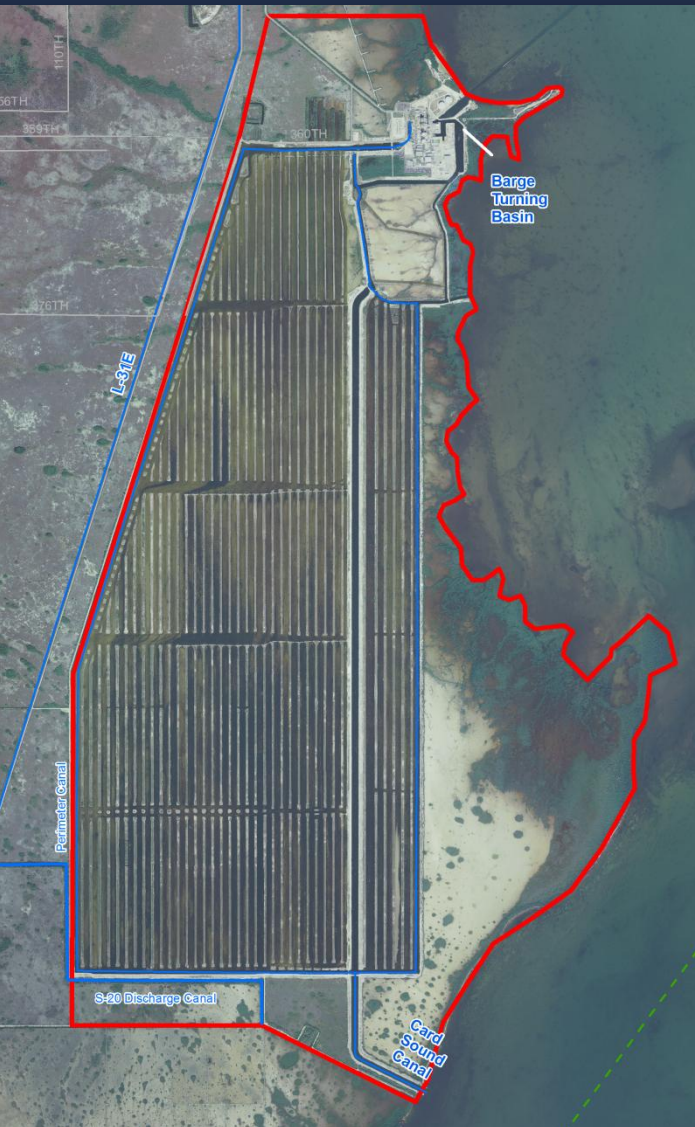


FPL Turkey Point Power Plant



- **U.S.A. v. Florida Power and Light, U.S. District Court Southern District of Florida 1970**
 - Direct hot water discharge to Biscayne Bay
 - Caused adverse effects in the Bay
- **EPA and FPL Settled in 1971**
 - Re-circulating Cooling Canals
 - No Discharges to Biscayne Bay

Cooling Canal Agreements



1972 AGREEMENT

- FPL and Central and Southern Flood Control District (District)
- Before permitting program
- District and FPL concerned that Cooling Canals would degrade surface and groundwater by westward migration of saltwater

1972 Agreement



- “restrict saline water from the cooling canals westward....to those amounts which would not occur without the existence of the cooling area”
- “limit loss of fresh water from the area west of Levee 31E....”

1972 Agreement



- **Seepage Control Method:**
 - Interceptor Ditch
 - Use of pumps
 - Maintain seaward gradient
- **Monitoring Program**
 - 35 Locations
 - Water Elevations
 - Chloride, Conductivity and Temperature
 - Quarterly reporting and meetings

1983 Agreement



- **Superseded prior agreements**
- **Continued purpose of the interceptor ditch to restrict westward movement of saline water**

1983 Agreement



- **Recognized FPL had performed obligations satisfactorily**
- **Reduced Monitoring Locations to 4 stations**
 - west side only
- **Reduced frequency of reporting from quarterly to annual**

1983 Key Enforcement Provision



If the District determines that the interceptor ditch is not working:

“FPL agrees that it will immediately revise the operating criteria upon the written instructions of the Executive Director”

2008 Uprate Application



- **FPL Application to Uprate two existing nuclear units at Turkey Point**
- **FDEP, Miami-Dade County, and SFWMD conditioned approval of Uprate on a SFWMD approved monitoring plan to delineate extent of cooling canal water east and west surrounding Turkey Point**
- **Also required FPL to enter into a SFWMD approved 5th Agreement**

2009 Agreement



- Carries forward requirement that the Interceptor Ditch must prevent saline water from moving westward
- Carries forward the SFWMD's discretion to determine impacts
- Carries forward Executive Director's authority to require measures to prevent saline water from moving west
- Carries forward requirement that FPL bear all cost associated with it's obligations...

2009 Agreement



- **Adds authority for Biscayne Bay delineation and determination of impacts**
- **Adds authority for surrounding ecological assessment**
- **Adds SFWMD involvement in determination of remedial measures**
 - **Consultation with time frames**
 - **Declaration of impasse**

2009 Agreement



- **Adds comprehensive monitoring and delineation plan surrounding Turkey Point Power Plant**
- **Adds “raw data” requirement**
- **Adds District access requirement**
- **Even if there were no revisions to the 1983 Agreement, the first step would be to implement this delineation/monitoring plan**

2009 Agreement



- **Change to Paragraph II (D) 2:**

Old: “If the DISTRICT, in its sole discretion, determines that the monitoring data: indicates....”

New: “If the DISTRICT, in its sole discretion, determines that the data from the 2009 Plan or any other source: indicates....”

FPL Turkey Point Power Plant
Groundwater, Surface Water,
and Ecological Monitoring Plan

EXHIBIT B



South Florida Water Management District
Florida Department of Environmental Protection
Miami-Dade County Department of Environmental Resource Management

October 14, 2009

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Comprehensive Groundwater Quality, Surface Water Quality & Ecological Monitoring Plan

Damon Meiers
Stormwater Division Director



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Purpose of Monitoring Plan



- **Delineate the extent of existing Cooling Canal System (CCS) water movement**
- **Determine the effects of anticipated small increases in temperature, and salinity due to the Uprate project**
- **Identify any impacts to ecologic conditions**
- **Gather data necessary to determine future steps and complement other activities in the region**

Introduction to the Plan



- Determine the effects and extent of the CCS water on surface water, groundwater, and ecological conditions
- Adaptive monitoring approach
- Tracer suite to track CCS water

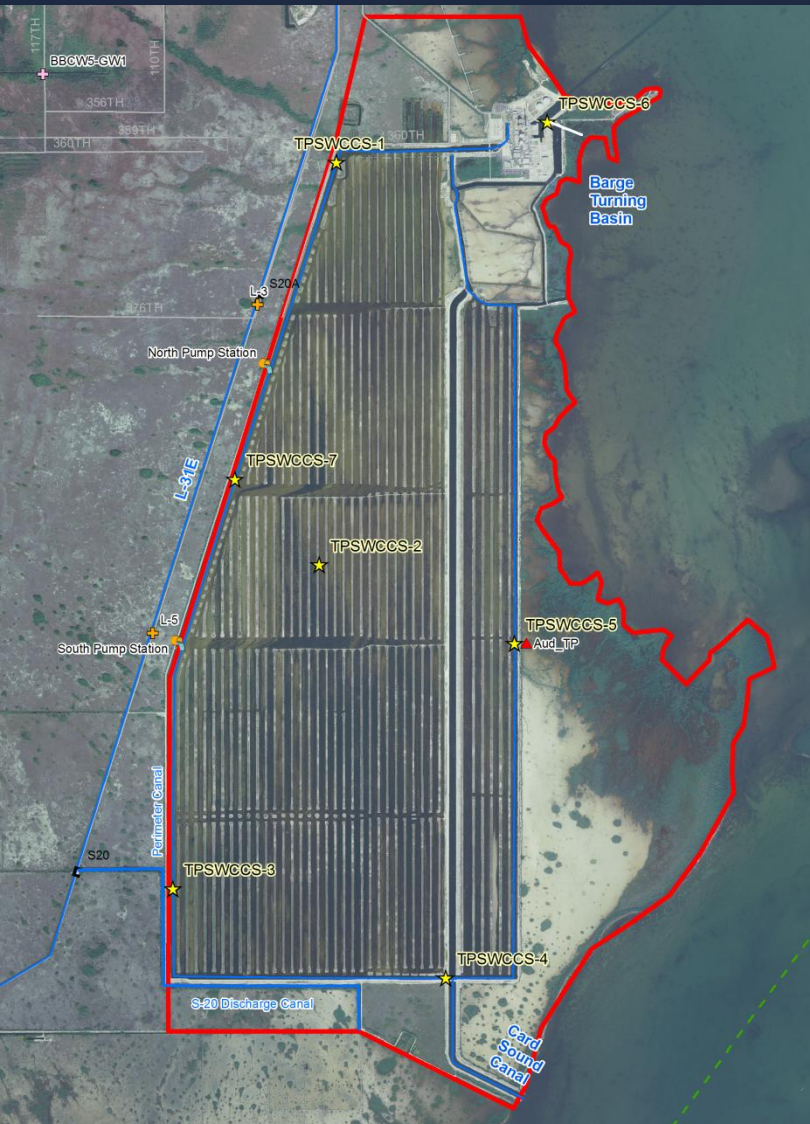
- **Well clusters with screen intervals in upper, middle, and lower portions of aquifer**
- **Continuous, quarterly and semi-annual sampling**
- **Electromagnetic resistivity survey to be conducted over Bay to get a broad-scale estimate of salinity**

Surface Water Monitoring



- **Monitoring in CCS, Biscayne Bay, freshwater canals, and tidal canals (wetland surface and groundwater monitoring addressed in ecological section)**
- **Continuous, quarterly and semi-annual sampling**

CCS Water Budget



- Evaluates exchange between the CCS and the groundwater, surface water, and air
- Bathymetric/volumetric survey of the CCS and interceptor ditch required
- Time-series volumetric spreadsheet required to calculate water budget

- **Spatially characterize ecological conditions via broad reconnaissance surveys**
- **Identify stressed areas in the vicinity of the CCS**
- **Establish transects and plots in freshwater and saline wetlands**
- **Initiate Biscayne Bay benthic SAV and faunal assessment**

Implementation and Reporting



- **Minimum six months to implement the plan and be fully operational**
- **Uprate project estimated to be online in the spring of 2012; two years of pre-Uprate project monitoring expected**
- **Data collection and reporting specifications provided; reporting to be provided via web portal**

**FPL Turkey Point Power Plant
Groundwater, Surface Water,
and Ecological Monitoring Plan**

EXHIBIT B



Staff Recommendation

South Florida Water Management District
Florida Department of Environmental Protection
Miami-Dade County Department of Environmental Resource Management

October 14, 2009

Terrie Bates
Assistant Deputy Director
Regulatory & Public Affairs

Staff Recommendation



Approval of a resolution of the Governing Board of the South Florida Water Management District approving the Fifth Supplemental Agreement between Florida Power and Light Company and the South Florida Water Management District for the purpose of governing the rights and obligations of the parties concerning the operation and monitoring of the cooling canal system for Florida Power and Light Company's power generating plant at Turkey Point in Miami-Dade County, Florida